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## <u>REMARKS</u>

Claims in the case are 1-3, 5, 6, 10, 11, 13 and 14, upon entry of this amendment. Claims 1 and 10 have been amended, and Claims 4, 7-9 and 12 have been cancelled herein.

Claims 9 and 12 stand rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Claims 9 and 12 has been cancelled herein. The polymer formulas of Claim 9 that have been introduced into Claim 1 by amendment herein, have been modified to introduce a "C" into the cyano groups, such that the cyano groups are now represented as follows: −C≡N. In addition, for purposes of improved clarity, the tertiary amine groups of the formulas have been modified to include a "−CH₃" group.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to distinctly claim the subject matter which they regard as their invention. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-6, and 11-14 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,384,221 (**Savant et al**). This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Claim 1 has been amended to include polymer formulas XIV, XV, XVI and XVIII of Claim 9 (which has been cancelled herein). Savant et al does not disclose the optical recording material of Applicants' present claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is noted that the present rejection does not include Claim 9, a portion of the subject matter of which has been introduced into Claim 1 by amendment herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Savant et al</u>.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-8, 11, 12 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Offenlegungsschrift DE 44 31 823 A1 (**Haarer et al**). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Claim 1 has been amended to include polymer formulas XIV, XV, XVI and XVIII of Claim 9. Haarer et al does not disclose the optical recording material of Applicants' present claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is noted that the present rejection does not include Claim 9, a portion of the subject matter of which has been introduced into Claim 1 by amendment herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Haarer et al</u>.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-12 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Offenlegungsschrift DE 43 39 862 A1 (**Stumpe et al**). In light of the amendments herein and the following remarks, this rejection is respectfully traversed.

Stumpe et al do not disclose the optical recording material of Applicants' present claims. In particular, Stumpe et al do not disclose an optical recording material that includes a polymeric azo dyestuff selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII of Applicants' present Claim 1. The copolymers disclosed by Stumpe et al (e.g., as represented by their formulas IV, V and VI on page 12) are not the same as polymer formulas XIV, XV, XVI and XVIII of Applicants' present Claim 1.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Stumpe et al</u>.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-12 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Offenlegungsschrift DE 197 03 132 A1 (**Berneth et al DE**). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Berneth et al DE do not disclose the optical recording material of Applicants'

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present claims, which includes a polymeric azo dyestuff selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. The copolymers disclosed by <u>Berneth et al DE</u> (e.g., on pages 9-15) are not the same as polymer formulas XIV, XV, XVI and XVIII of Applicants' present Claim 1.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Berneth et al DE</u>. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-12 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Internationale Veröffentlichungsnummer WO 98/51721 (**Berneth et al WO**). This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Berneth et al WO do not disclose the optical recording material of Applicants' present claims. In particular, the homopolymers of Berneth et al WO do not encompass or otherwise represent a disclosure of the polymeric azo dyestuff polymer represented by formulas XIV, XV, XVI and XVIII of Applicants' present Claim 1.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Berneth et al WO</u>. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-8, 11 and 12 stand rejected under 35 U.S.C. §102(b) as being anticipated by "Erasable holograms in polymeric liquid crystals," Makromol. Chem., Rapid Commun. 8, 467-471 (1987) (Eich et al). This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Claim 1 has been amended to include polymer formulas XIV, XV, XVI and XVIII of Claim 9. Eich et al does not disclose the optical recording material of Applicants' present claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is noted that the present rejection does not include Claim 9, a portion of the subject matter of which has been introduced into Claim 1 by amendment herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Eich et al</u>.

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Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-8, 11 and 12 stand rejected under 35 U.S.C. §102(b) as being anticipated by "Electro-optical effects of azo dye containing liquid crystalline copolymers," Makromol. Chem. 185, 1327-1334 (1984) (Ringsdorf et al).

Claim 1 has been amended to include polymer formulas XIV, XV, XVI and XVIII of Claim 9. Ringsdorf et al does not disclose the optical recording material of Applicants' present claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is noted that the present rejection does not include Claim 9, a portion of the subject matter of which has been introduced into Claim 1 by amendment herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over Ringsdorf et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-8, 11, 12 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,496,670 (**Hvilsted et al**). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Claim 1 has been amended to include polymer formulas XIV, XV, XVI and XVIII of Claim 9. Hvilsted et al does not disclose the optical recording material of Applicants' present claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is noted that the present rejection does not include Claim 9, a portion of the subject matter of which has been introduced into Claim 1 by amendment herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unanticipated by and patentable over <u>Hvilsted et al</u>. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-12 and 14 stand rejected under 35 U.S.C. §103(a) as being obvious over United States Patent No. 5,641,846 (**Bieringer et al**). This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Bieringer et al does not disclose, teach or suggest the optical recording material of Applicants' claims which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. It is respectfully Mo-6633

submitted that, modification of copolymers 4, 6-8 and 10-12 with the azo monomers disclosed at columns 5 or 6 of <u>Bieringer et al</u> (as argued on page 5 of the Office Action of 8 July 2003), would not result in the polymeric azo dystuffs represented by formulas XIV, XV, XVI and XVIII of Applicants' present Claim 1.

In addition, <u>Bieringer et al</u> does not disclose or suggest the desirable physical properties of the optical recording materials of Applicants' present claims. For example, regarding desirable physical properties of the optical recording devices according to Applicants' claims, <u>Bieringer et al</u> does not disclose or suggest the speed at which a maximum level of birefringence is reached upon exposure to a reading laser, or the absence of bleach out after successive writing / deletion operations. See the Examples of Applicants' specification, in particular, Example 3, page 26, and page 28, line 12 through page 29, line 2, and Figure 1.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over <u>Bieringer et al</u>.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-14 stand rejected under 35 U.S.C. §103(a) as being obvious over either <u>Bieringer et al</u>, <u>Hvilsted et al</u>, <u>Ringsdorf et al</u>, <u>Eich et al</u>, <u>Berneth et al WO</u>, <u>Haarer et al</u> or <u>Stumpe et al</u> in view of <u>Savant et al</u>. In light of the amendments herein and the following remarks, this rejection is respectfully traversed.

Bieringer et al, Hvilsted et al, Ringsdorf et al, Eich et al, Berneth et al WO, Haarer et al, Stumpe et al and Savant et al, either alone or in any combination, disclose, teach or suggest the optical recording material of Applicants' claims, which includes polymeric azo dystuffs selected from at least one polymer represented by formulas XIV, XV, XVI and XVIII. Claim 1 has been amended herein to include a portion of the subject mater of Claim 9, in particular, polymer formulas XIV, XV, XVI and XVIII.

In addition, Bieringer et al, Hvilsted et al, Ringsdorf et al, Eich et al, Berneth et al WO, Haarer et al, Stumpe et al and Savant et al, either alone or in combination, do not disclose or suggest the desirable physical properties of the optical recording materials of Applicants' present claims. For example, regarding desirable physical properties of the optical recording devices according to Applicants' claims, the cited references do not disclose or suggest the speed at which a maximum level of Mo-6633

birefringence is reached upon exposure to a reading laser, or the absence of bleach out after successive writing / deletion operations. See the Examples of Applicants' specification, in particular, Example 3, page 26, and page 28, line 12 through page 29, line 2, and Figure 1.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over <u>Bieringer et al</u>, <u>Hvilsted et al</u>, <u>Ringsdorf et al</u>, <u>Eich et al</u>, <u>Berneth et al WO</u>, <u>Haarer et al</u> or <u>Stumpe et al</u> in view of <u>Savant et al</u>. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-12 and 14 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-17 of co-pending and commonly assigned United States Patent Application No. 09/936,114 (attorney docket number Mo6586 / LeA 33,417; filed in the US on 11 October 2001).

Applicants wish at this time to hold comment and action in abeyance with regard to the present provisional obviousness-type double patenting rejection until an indication of allowance is received in either the present patent application or United States Patent Application No. 09/936,114.

Claims 1-12 and 14 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-17 of co-pending and commonly assigned United States Patent Application No. 09/936,122 (attorney docket number Mo6585 / LeA 33,633; filed in the US on 6 September 2001).

Applicants wish at this time to hold comment and action in abeyance with regard to the present provisional obviousness-type double patenting rejection until an indication of allowance is received in either the present patent application or United States Patent Application No. 09/936,122.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §112, and to define an invention that is unanticipated, unovbious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

By .

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